

**Notice of Allowability**

Application No.

09/780,370

Examiner

Michael Pyzocha

Applicant(s)

MARSHALL, ALAN D.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 05/05/2005.
2. ☒ The allowed claim(s) is/are 1-5, 7-11, 13, 14, 16 and 17.
3. ☒ The drawings filed on 12 February 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_



**ANDREW CALDWELL  
SUPERVISORY PATENT EXAMINER**

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**DETAILED ACTION**

1. Claims 1-5, 7-11, 13-14, 16-17 are pending.
2. Amendment filed 01/25/2005 has been received and considered.

***Claim Rejections - 35 USC § 101***

3. The rejection of Claim 15 has been withdrawn because claim 15 has been canceled.

***Allowable Subject Matter***

4. Claims 1-5, 7-11, 13-14, 16-17 are in allowable form.
5. The prior art does not show the limitation of creating multiple copies of each section of the plurality of sections of the data file; applying to each set of multiple copies a set of elementary watermarks such the each copy of a section contains a different elementary watermark; and storing the elementary watermark containing copies of each sections.

**EXAMINER'S AMENDMENT**

6. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure

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consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Robert Popa on 05/12/2005.

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**Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (previously presented) A method of applying a digital watermark to a data file, the method comprising:

creating a pre-calculated set of elementary watermarks and a plurality of sections of the data file by

creating multiple copies of each section of the plurality of sections of the data file;

applying to each set of multiple copies a set of elementary watermarks such that each copy of a section contains a different elementary watermark; and

storing the elementary watermark containing copies of each section;

calculating a data file watermark on receipt of a request for supply of the data file;

selecting pre-calculated elementary watermarks equivalent to constituent portions of the data file watermark by comparing the constituent portions of the data file watermark with the pre-calculated elementary watermarks; and

constructing a watermarked data file by assembling selected elementary watermarks combined with the plurality of sections of the data file.

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2. (previously presented) A method according to claim 1, wherein calculating the data file watermark comprises calculating a transaction specific watermark.

3. (previously presented) A method according to claim 2, wherein calculating the data file watermark comprises retrieving user data from a user database to construct the transaction specific watermark.

4. (original) A method according to claim 1, wherein the elementary watermarks are binary representations.

5. (previously presented) A method according to claim 1, wherein constructing the data file watermark comprises incorporating error correction data into the data file watermark.

6. (canceled)

7. (previously presented) A method according to claim 1, wherein constructing the data file watermark comprises accumulating a selected plurality of elementary watermark containing copies of the sections.

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8. (previously presented) A method according to claim 1, wherein creating the pre-calculated set of elementary watermarks and a plurality of sections of the data file comprises:

calculating and storing the set of elementary watermarks;  
and

calculating and separately storing the plurality of sections of data.

9. (previously presented) A method according to claim 8, wherein constructing the data file watermark comprises selecting each section of data and adding to it a pre-calculated elementary watermark selected by virtue of its correspondence with a constituent part of the data file watermark.

10. (original) A method according to claim 1, further comprising selecting sections of the data file most suitable for the addition of the elementary watermarks.

11. (previously presented) A method of implementing real-time transaction specific watermarking to generate a transaction specific digitally watermarked data file, the method comprising:

prior to receiving a transaction request for the data file:

dividing the data file into a plurality of sections;

creating a set of pre-calculated elementary

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watermarks;

creating multiple copies of each section of the plurality of sections of the data file;

applying to each set of multiple copies the set of elementary watermarks such that each copy of a section contains a different elementary watermark; and

storing the copies of the sections containing the elementary watermarks;

on receiving a transaction request for the supply of the data file:

calculating a transaction specific watermark;

selecting pre-calculated elementary watermarks equivalent to constituent portions of the transaction specific watermark by comparing the constituent portions of the transaction specific watermark with the pre-calculated units of data; and

constructing a transaction specific watermarked data file by assembling the selected pre-calculated elementary watermarks together with corresponding ones of the plurality of sections.

12. (canceled)

13. (previously presented) A method according to claim 11,

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wherein creating the pre-calculated elementary watermarks comprises:

calculating and storing the set of elementary watermarks;  
and

separately storing the plurality of sections of data.

14. (previously presented) A method according to claim 13, wherein constructing the transaction specific watermarked data file comprises:

selecting each section of data and adding to it a pre-calculated elementary watermark selected by virtue of its correspondence with a constituent part of the data file watermark.

15. (canceled)

16. (previously presented) An apparatus for applying a digital watermark to a data file, the apparatus comprising a processor adapted:

to create a pre-calculated set of elementary watermarks and a plurality of sections of the data file by

creating multiple copies of each section of the plurality of sections of the data file;



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applying to each set of multiple copies a set of elementary watermarks such that each copy of a section contains a different elementary watermark; and

storing the elementary watermark containing copies of each section;

to calculate a data file watermark on receipt of a request for supply of the data file;

to select pre-calculated elementary watermarks equivalent to constituent portions of the data file watermark by comparing the constituent portions of the data file watermark with the pre-calculated elementary watermarks; and

to construct a watermarked data file by assembling selected elementary watermarks combined with the plurality of sections of the data file.

17. (previously presented) A method of applying a transaction-specific digital watermark having N different elements to a data file, comprising:

dividing the data file into a plurality of sections, each section suitable to have an element of the watermark applied to it;

generating a set of N copies of each section of the data file;

applying to each copy of each set of copies a different one of the respective N elements;

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generating, upon receipt of a request for a data file, the transaction-specific watermark; and

aggregating copies from the different sets of copies to create a data file to which the transaction-specific watermark has been applied.

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**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Pyzocha whose telephone number is (571) 272-3875. The examiner can normally be reached on 7:00am - 4:30pm first Fridays of the bi-week off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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